Further notes

matthew gream
march 2000

Introduction

The following notes are intended to be an addendum to the assignment, they are rough in form, but represent possible additional activities that can build upon the assignment. Unfortunately I do not have time to turn these into something more rigorous.

I have provided a rough background to the development of intellectual activity, and the state of the discipline of Art History. I have then suggested an experiment, which is an instance of a larger activity, use to develop the foundations of the discipline. Finally, I have provided a number of other insights, purely as a thought experiment.

Background

'Intellectual activity' is going through something of a renaissance at this point in history, as society is moving towards a high point in the 'information age'. The high point will be characterised by a mastery of the universality of intellectual activity.

For instance, in scholastic activity, there are clear trends towards universality through the mastery of the breadth and depth of activity in disciplines. Interdisciplinary activities are blurring existing boundaries, and methods and knowledge are being applied from one discipline to another. The foundations of disciplines are also being questioned and investigated, and the similarity and universality of foundations across disciplines are being explored and studied in themselves.

In all areas of intellectual activity, including scholastic activity, these trends are at various phases of development. For instance, there are conceptual similarities between problems in software engineering and structural engineering, although the latter profession has an advance on solving these. There are conceptual similarities between problems tackled by impressionist painters and contemporary computer scientists, even though the two are a hundred years apart. Another example is the similarity between architectural problems in the Babbage Analytical Engine, and mid-twentieth century computer engineers, even though the former worked in mechanics, and the latter worked in silicon.

Art History can be seen as a partner to any other discipline that uncovers and understands the past: archeology, history, economics and literature to name a few. The following developments have, or are, occurring across the discipline of Art History:

1. it has moved beyond the limited analysis of works, artists, schools and styles by themselves, to draw in from a surrounding historical context and therefore has come to understand the complexity in the process of analysis;

2. it has come to understand that the progression of style and technique is not strictly linear across space and time, and that pockets may develop ahead of their time in isolated areas, and may flourish and die, only to be rediscovered elsewhere;

3. it has come to understand that insights are gained through interdisciplinary research, such as the application of econometric, quantitative or philosophical tools and techniques to strengthen theoretical foundations.

The developments in Art History are in different phases of maturation, and have not yet coalesced. For instance, if art historical knowledge was codified and linked in an electronic medium, it would become possible to develop one single body of consistent and coherent knowledge, which draws upon all manner of knowledge before it. In the history of knowledge, Art History will be seen at this point in time as being stylistic, disjoint, not unified and lacking strong foundations: it has yet to progress into the knowledge equivalent of naturalism.

Imagine if Art History knowledge was available in a fluid and malleable electronic medium: it could be altered, restructured and perturbed based upon new research, or insights from other fields. For instance, consider the case where a

researcher in archeology creates a new cachet of knowledge relating to a find in Athens that links two previously unknown mythological symbols. From this, an automatic process could inform an Art History researcher that a particular medieval work of art – having those two symbols – needs to be re-interpreted. Or, in fact, there would be no call for a re-interpretation, as interpretations are created in real-time based upon surrounding data.

I would almost suggest that researchers should stop researching and spend time codifying existing knowledge into the new medium, as any current research is likely to become obsolete or be founded on incomplete information.

Experiment

Consider the construction of an experiment, which involves building a relationship between the information uncovered through the research activity.

By taking the researched knowledge, a conceptual map could be constructed. For instance, the map would have objects of 'workshop', 'artist', 'sculpture', 'wall painting', 'canvas painting' and 'guild'; and attributes applied to these objects. Relating data is an established problem in information science, and suitable techniques and notations exist.

By doing this, it would be possible to reason about the relationships between objects. For instance, the links between 'artist' and 'workshop' may show that particular types of artists tended to gravitate to particular workshops. It would then be possible to explore why that is the case.

The end result would be a clear picture of the knowledge relationships, and where possible gaps exist, and where further exploration could be carried out. A group of researchers could work to populate, develop and build the map; based upon entering already existing, but not yet electronically codified, knowledge.

Consider the refinement of the experiment, by integrating broader information, and by refining the conceptual basis of the knowledge.

One problem with the conceptual map is that it is specialised in time and space: it is only concerned with the Renaissance

artists' production methods. However, production methods are observed across history, and have existed in many forms. By drawing from this diversity, it would be possible to understand similarities and differences and therefore, develop further insights. For instance, we know that contemporary professional societies are similar to the Florentine guilds, and with the extensive knowledge available about these societies, we may find that there is a gap in our understanding of how the guilds enforced technical quality. This could be an avenue for research.

Broader information about production methods could come from current society, British Victorian artists, French court artists, or contemporary engineers, or even early twentieth century cartoonists.

Consider the application of this experiment, by using the information to reason about new structures, organisations and conceptually similar problems.

The conceptual map could provide a basis for experimentation. Consider that the map would illustrate that location of 'training' was in the 'workshop' ('on the job' training). However, in contemporary society, training is carried out in a 'university'. This illustrates that 'training' could occur in different places depending on various surrounding circumstances. Perhaps then, this map could help to simulate and reason about the optimal location of activities in new environments and structures.

Consider the use of mathematical techniques in the experiment, to allow for stronger claims to be made about reasoning processes.

The use of quantitative and statistical techniques could come into play. For instance, if new knowledge is developed based upon 'reasoned extrapolation' from other knowledge (i.e. an inference), then this new knowledge could be afforded a much lower 'rating' than any knowledge developed based upon direct physical evidence (naturally, an inference is speculative and therefore less exact). When drawing inferences about stylistic developments or other relationships between data, it could then become possible to provide a statistical measure of accuracy. It could then become possible to reason about the quality of judgements, much more so than can be done at the

moment. This would remove a lot of quality problems in research.

Insights

Based on the research, there are a number of other insights that come to mind, and they are listed here.

1. There is the Bauhaus design school, which had a particular approach to education aimed at developing universally competent artists. How is its development procedure similar to that of the Florentine artists? More generally, how are many other art and creative training processes, and mentoring processes, similar? Is there any link between artistic temperament and personality, and training processes?

2. There is a contemporary business environment, where creativity is directed towards product creation and commercial exploitation, and it could be argued that there are similarities between the high-technology environment in Silicon Valley and Cambridge, to the artistic environment in Florence. Is there such a similarity? How are new-age entrepreneurs and engineers similar in status to Florentine artists? Consider the increasing social status of new-age engineers, and the primacy of software development, and the construction of an information medium, and how this relates to the investigations into reality in Florence.

3. There is a lot of scholastic theory into organisational theory, and appropriate structures of organisations, and as the Florentine workshops are an organisation, this contemporary theory could be used to gather further insights into the workings of the Florentine workshops. What theoretical model do the workshops fit into? What does that model allow us to understand?

4. By investigating the artists and styles in particular workshops, it may be possible to strengthen an understanding of the provenance of works of art, or the influences and developments in style between artists and locations. We know that northern artists came to Florence, and perhaps this knowledge can help to understand which schools influenced their style and development. This would help strengthen an understanding of developments in the north, and the entire period itself.

5. A conceptual map can help to understand the universality of the creative process, as it is not just manifest in visual art, but across other creative arts as well. For instance, this could occur by exploring the similarity in production methods across time, and with different manifestations of creativity (literature, film and so on).